

# PATENT COOPERATION TREATY

# PCT

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44*bis*)

Applicant's or agent's file reference F-9359-PC	<b>FOR FURTHER ACTION</b>	See item 4 below
International application No. PCT/US2008/070856	International filing date ( <i>day/month/year</i> ) 23 July 2008 (23.07.2008)	Priority date ( <i>day/month/year</i> ) 31 July 2007 (31.07.2007)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant SCIENTIFIC-ATLANTA, INC.		

1.	This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 <i>bis</i> .1(a).																								
2.	This REPORT consists of a total of 8 sheets, including this cover sheet.  In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.																								
3.	<p>This report contains indications relating to the following items:</p> <table style="width: 100%;"> <tr> <td style="width: 10%; text-align: center;"><input checked="" type="checkbox"/></td> <td style="width: 30%;">Box No. I</td> <td style="width: 60%;">Basis of the report</td> </tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>Box No. II</td> <td>Priority</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. III</td> <td>Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. IV</td> <td>Lack of unity of invention</td> </tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>Box No. V</td> <td>Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. VI</td> <td>Certain documents cited</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. VII</td> <td>Certain defects in the international application</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. VIII</td> <td>Certain observations on the international application</td> </tr> </table>	<input checked="" type="checkbox"/>	Box No. I	Basis of the report	<input checked="" type="checkbox"/>	Box No. II	Priority	<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	<input type="checkbox"/>	Box No. IV	Lack of unity of invention	<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	<input type="checkbox"/>	Box No. VI	Certain documents cited	<input type="checkbox"/>	Box No. VII	Certain defects in the international application	<input type="checkbox"/>	Box No. VIII	Certain observations on the international application
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4.	The International Bureau will communicate this report to designated Offices in accordance with Rules 44 <i>bis</i> .3(c) and 93 <i>bis</i> .1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44 <i>bis</i> .2).																								

<p style="text-align: center;">The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland</p> <p>Facsimile No. +41 22 338 82 70</p>	<p>Date of issuance of this report 02 February 2010 (02.02.2010)</p> <p>Authorized officer  <div style="text-align: center; font-weight: bold;">Masashi Honda</div></p> <p>e-mail: pt08.pct@wipo.int</p>
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# PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY

# PCT

To:

see form PCT/ISA/220

## WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing  
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference  
see form PCT/ISA/220

**FOR FURTHER ACTION**  
See paragraph 2 below

International application No.  
PCT/US2008/070856

International filing date (day/month/year)  
23.07.2008

Priority date (day/month/year)  
31.07.2007

International Patent Classification (IPC) or both national classification and IPC  
INV. H04N5/765 H04N5/45  
ADD. H04N5/783

Applicant  
SCIENTIFIC-ATLANTA, INC.

**1. This opinion contains indications relating to the following items:**

- ☒ Box No. I Basis of the opinion
- ☒ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

**2. FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

**3. For further details, see notes to Form PCT/ISA/220.**

Name and mailing address of the ISA:



European Patent Office - P.B. 5818 Patentlaan 2  
NL-2280 HV Rijswijk - Pays Bas  
Tel. +31 70 340 - 2040 Tx: 31 651 epo nl  
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Date of completion of  
this opinion

See form  
PCT/ISA/210

Authorized Officer

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**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
PCT/US2008/070856

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**Box No. I Basis of the opinion**

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1. With regard to the **language**, this opinion has been established on the basis of:
  - ☒ the international application in the language in which it was filed
  - ☐ a translation of the international application into , which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1 (b)).
2. ☐ This opinion has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43bis.1(a))
3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material:
    - ☐ a sequence listing
    - ☐ table(s) related to the sequence listing
  - b. format of material:
    - ☐ on paper
    - ☐ in electronic form
  - c. time of filing/furnishing:
    - ☐ contained in the international application as filed.
    - ☐ filed together with the international application in electronic form.
    - ☐ furnished subsequently to this Authority for the purposes of search.
4. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
5. Additional comments:

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**Box No. II Priority**

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1. ☒ The validity of the priority claim has not been considered because the International Searching Authority does not have in its possession a copy of the earlier application whose priority has been claimed or, where required, a translation of that earlier application. This opinion has nevertheless been established on the assumption that the relevant date (Rules 43bis.1 and 64.1) is the claimed priority date.
2. ☐ This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43bis.1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.
3. Additional observations, if necessary:

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
PCT/US2008/070856

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**Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

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1. Statement

Novelty (N)	Yes: Claims	<u>4-10,12,15-20</u>
	No: Claims	<u>1,2,3,11,13,14</u>
Inventive step (IS)	Yes: Claims	
	No: Claims	<u>1-20</u>
Industrial applicability (IA)	Yes: Claims	
	No: Claims	<u>1-20</u>

2. Citations and explanations

see separate sheet

Re Item V.

- 1 Reference is made to the following document:

D1 : US 2006/093320 A1 (HALLBERG BRYAN S [US] ET AL) 4 May 2006 (2006-05-04)

2 INDEPENDENT CLAIM 1

The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of **claim 1** is not new in the sense of Article 33(2) PCT.

- 2.1 With respect to **claim 1**, the document **D1** discloses (the references in parentheses applying to this document):

*A method (figure 4; paragraphs 66-75), comprising the steps of:*

- (a) receiving a sequence of digitized uncompressed pictures corresponding to a first video program (numeral 210, paragraph 67, sentence 2);*
- (b) producing a first video stream of compressed pictures, each of the compressed pictures corresponding to a picture in the received sequence of digitized uncompressed pictures, wherein the first video stream is produced by a video compression engine (numerals 220, 230);*
- (c) producing reconstructed pictures corresponding to a decompressed version of respective compressed pictures in the first video stream, wherein the reconstructed pictures are produced by the video compression engine (numerals 250, 260, ref. path 2, paragraphs 71 and 75); and*
- (d) providing a presentation of the first video program from the reconstructed pictures produced by the video compression engine (numeral 270).*

Therefore, the subject-matter of **claim 1** is not new in the sense of Article 33(2) PCT.

3 INDEPENDENT CLAIM 13

The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of **claim 13** is not new in the sense of Article 33(2) PCT.

3.1 With respect to **claim 13**, the document **D1** discloses (the references in parentheses applying to this document):

*A system (figure 4, paragraphs 66-75), comprising a video compression engine (numerals 220, 230, 250, 260) configured to:*

- *provide reconstructed pictures "corresponding to a real-time presentation" of a video program (numerals 250, 260; ref. path 3);*
- *provide a compressed version of the real-time presentation (numerals 220, 230; ref. path 3, paragraph 75); and*
- *store the compressed version of the real-time presentation to a persistent storage device (numeral 240, ref. path 3, paragraph 75) while simultaneously providing the reconstructed pictures for the real-time presentation of the video program (paragraph 75).*

Therefore, the subject-matter of **claim 13** is not new in the sense of Article 33(2) PCT.

4 DEPENDENT CLAIMS 2-12 AND 14-20

Dependent **claims 2-12** and **14-20** do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty or inventive step (Article 33(2) and (3) PCT).

Claim 2: Storing the first video stream to a persistent storage device while simultaneously providing the reconstructed pictures for the presentation of the first video program is known from **D1 (figure 4, numeral 240, ref. path 3, paragraph 75)**.

Claim 3: The expression *further comprises* which is used to introduce an **additional** feature to the subject-matter of **claims 2** is actually followed by *the step of only providing reference pictures* which is more restrictive in the sense that in **claim 2** both reference and non-reference pictures are provided. Therefore, **claim 3** can be considered as not adding anything new to **claim 2**.

It is also pointed out that performing trick play on the first video program is known from **D1 (paragraph 9)** and it is well known that trick play can be achieved by providing only reference pictures.

Claim 4: The expression *simultaneously on a real-time basis* is not clear and therefore, no inventive step can be derived.

Claim 5: The feature *the second video program* is neither defined in **claim 5**, nor in its parent claims, thereby rendering the subject-matter of **claim 5** unclear. Therefore, no inventive step can be derived.

Claim 6: The expression *a video quality of a future presentation of the stored first video program equals a video quality of the presentation of the first video program* defines the subject-matter in terms of the result to be achieved, which merely amounts to a statement of the underlying problem, without providing the technical features necessary for achieving this result. Therefore, no inventive step can be derived from **claim 6**.

Claim 7: Does not add anything new to **claim 1** (see claim 3).

Claim 8: see claim 4

Claim 9: The expression *from non-reference pictures* is unclear because reference pictures are required anyway in order to reconstruct the non-reference pictures. It is also pointed out that picture-in-picture is well known.

Claim 10: see claim 6

Claim 11: Delaying a display of the video program by one "picture time delay" is known from **D1 (paragraph 70)**.

Claim 12: The expression *a reconstructed pictures* is not coherent and it is also pointed out that picture-in-picture is well known.

Claim 14: Although **claim 14** is drafted as a dependent claim, it contains a subset of the features of **claim 13**. Therefore, **claim 14** should be drafted as an independent claim and **claim 13** as a dependent claim.

**Claim 14** is a rewording in terms of system features of corresponding method **claim 1** and corresponding **method claim 3**. Therefore, **claim 14** is not new.

Claim 15: see claim 10

Claims 16, 17 and 18: see claim 9

Claim 19: see claim 11

Claim 20: The addition of a video output port configured to format the reconstructed pictures for display is known from **D1 (figure 4, numeral 270, paragraph 66)**.